# **APPENDIX A: APPROVED HEC APPLICATION**

## **HUMAN ETHICS COMMITTEE**

# **Application for Approval of Research Projects**

Please write legibly or type if possible

**Note:** The Human Ethics Committee attempts to have all applications approved within three weeks but a longer period may be necessary if applications require substantial revision.

1	NATURE OF PROPOSED RESEARCH:					
	(a) Staff Research/ Student R	esearch (dele	te one)			
	(b) If Student Research -	Degree:	PhD (Informati	ion Science)		
		Course C	ode: <i>INFO 6</i>	90		
	(c) Project Title: Exploring to	he role of cus	stomers on eXtr	eme programming	g projects	
2	<b>INVESTIGATORS:</b>					
	(a) Principal Investigator					
	Name		Angela	Michelle	Martin	
	a mail addraga — anada					
	e-mail addressangela(					
	School/Dept/Group Infe		nagemeni	Dogition		
	(b) Other Researchers			Position		
	none			•••		
	(c) Supervisor (in the case of	of student rese	earch projects)			
	Dr Robert Biddle & D	r James Nob	le			
3	DURATION OF RESEARC	СН				
	(a) Proposed starting date for	or data collec	tion 15 Septem	nber 2003		
	(Note: that NO part of tapproval being given)	the research re	equiring ethical	approval may comi	mence prior to	
	(b) Proposed date of con	npletion of pr	oject as a whole	e 31 March 2008		
4	PROPOSED SOURCE/S CONSIDERATIONS	S OF F	UNDING A	ND OTHER	ETHICAL	
	(a) Sources of funding for the project					
	Please indicate any ethical funding	l issues or con	flicts of interest the	hat may arise becaus	se of sources of	
	e.g. restrictions on publica	tion of results				
	No funding has bee	n sought to a	id this research	ı		
	(b) Is any professional code	of ethics to b	e followed	N	0	
	If	•	yes,		name	

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(c) Is ethical approval required from any other body	No
If yes, name and indicate when/if approval will be given	

#### 5 DETAILS OF PROJECT

**Briefly Outline:** 

- (a) The objectives of the project
  - To explore and describe how the XP concept of an on-site customer has been implemented in both New Zealand based and international software development projects.
  - To propose an extension(s) to the XP "on-site customer" practice based on the case study and related literature findings.
- (b) Method of data collection
  - A combination of qualitative data collection techniques will be used including semi-structured interviews, observations of the project team at work by the researcher and review of artefacts/documents produced as part of the project work.
- (c) The benefits and scientific value of the project
  - To explore how software development methodologies are used by practitioners on real projects so that we may better understand this process and formulate and present methodologies that will allow practitioners to complete software development projects with less cost and schedule overruns and met the needs of the users of the systems.
- (d) Characteristics of the participants
  - Software developers, software development project leaders and domain/business experts that are working (directly or indirectly) on the XP project.
- (e) Method of recruitment
  - Organisations will be initially approached via XP community interaction mechanisms including email, lists, user groups and conference participants with a brief outline of the intended research.
  - The researcher will then work with each interested organisation to develop a mutually agreeable research proposal or terms of reference which clearly outlines the purpose of the research, the scope of the research, the time commitments expected from the organisation's staff. This proposal will supplement the information sheet and consent form and the initial draft of this proposal is attached to this application.
  - Participants on the project nominated by the organisation for study will then be approached, participation will be voluntary.
- (f) Payments that are to be made/expenses to be reimbursed to participants
  - o None
- (g) Other assistance (e.g. meals, transport) that is to be given to participants

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- None, the researcher will go to the participant
- (h) Any special hazards and/or inconvenience (including deception) that participants will encounter
  - No deception will be involved. The organisation will be affected by 'lost' project time but this time could be considered part of the general postimplementation reviews that are best-practice to implement.
- (i) State whether consent is for (delete where not applicable):
  - (i) the collection of data
  - (ii) attribution of opinions or information
  - (iii) release of data to others
  - (iv) use for a conference report or a publication
  - (v) use for some particular purpose (specify)

.....

Attach a copy of any questionnaire or interview schedule to the application

#### Attached

- (j) How is informed consent to be obtained (see paragraphs 4.31(g), 5.2, 5.5 and 5.61 of the Guidelines)
  - (i) the research is strictly <u>anonymous</u>, an information sheet is supplied and informed consent is implied by voluntary participation in filling out a questionnaire for example (include a copy of the information sheet)

No

- (ii) the research is <u>not anonymous</u> but is confidential and informed consent will be obtained through a signed consent form (include a copy of the consent form and information sheet) **Yes**
- (iii) the research is <u>neither anonymous or confidential</u> and informed consent will be obtained through a signed consent form (include a copy of the consent form and information sheet) **No**
- (iv) informed consent will be obtained by some other method (please specify and provide details) No

.....

With the exception of anonymous research as in (i), if it is proposed that written consent will not be obtained, please explain why

# Not applicable

(k) If the research will not be conducted on a strictly anonymous basis state how issues of confidentiality of participants are to be ensured if this is intended. (See paragraph 4.3.1(e) of the Guidelines). (e.g. who will listen to tapes, see questionnaires or have access to data). Please ensure that you distinguish clearly between anonymity and confidentiality. Indicate which of these are applicable.

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(i)	access to the research data will be restricted to the investigator $No$
(ii)	) access to the research data will be restricted to the investigator and their supervisor (student research) $\pmb{Yes}$
(ii	i) all opinions and data will be reported in aggregated form in such a way that individual persons or organisations are not identifiable $\it Yes$
(iv	Other (please specify)
	Not applicable
co	occdure for the storage of, access to and disposal of data, both during and at the nclusion of the research. (see section 7 of the guidelines). Indicate which are plicable:
	(i) all written material (questionnaires, interview notes, etc) will be kept in a
	locked file and access is restricted to the investigator and supervisor
	Yes
	(ii) all electronic information will be kept in a password-protected file and access will be restricted to the investigator and supervisor Yes
	(iii) all questionnaires, interview notes and similar materials will be destroyed:
	(a) at the conclusion of the research No
<u>or</u>	(b)3 years after the conclusion of the research Yes
(iv	e) any audio or video recordings will be returned to participants and/or electronically wiped Yes
(v)	other procedures (please specify):
	None
	a and material are not to be destroyed please indicate why and the procedures aged for ongoing storage and security
	<del>t</del>
<i>No</i>	
	Feedback procedures (See section 8 of the Guidelines). You should indicate whether feedback will be provided to participants and in what form. If feedback will not be given, indicate the reasons why.
le	Feedback procedures (See section 8 of the Guidelines). You should indicate whether feedback will be provided to participants and in what form. If feedback will not
le	Feedback procedures (See section 8 of the Guidelines). You should indicate whether feedback will be provided to participants and in what form. If feedback will not be given, indicate the reasons why.  O Participants will be involved in continual feedback to confirm the researchers interpretation of their comments and to validate findings.
(m)	Feedback procedures (See section 8 of the Guidelines). You should indicate whether feedback will be provided to participants and in what form. If feedback will not be given, indicate the reasons why.  O Participants will be involved in continual feedback to confirm the researchers interpretation of their comments and to validate findings. Participants will also be provided with a copy of the resulting publications.  Reporting and publication of results. Please indicate which of the following are appropriate. The proposed form of publications should be indicated on the information sheet and/or consent form.

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- (iii) deposit of the research paper or thesis in the University Library (student research)

  Yes
- (iv) other (please specify)

...None.....

Signature of investigators as listed on page 1 (including supervisors).

# NB: All investigators must sign before an application is submitted for approval

[paper copies are signed by Angela Martin and her thesis advisors]

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#### APPLICATIONS FOR HUMAN ETHICS APPROVAL

#### **CHECKLIST**

- Have you read the Human Ethics Committee Guidelines?
- Is ethical approval required for your project?
- Have you established whether informed consent needs to be obtained for your project?
- In the case of student projects, have you consulted your supervisor about any human ethics implications of your research?
- Has your supervisor read and signed the application?
- Have you included an information sheet for participants which explains the nature and purpose of your research, the proposed use of the material collected, who will have access to it, whether the data will be kept confidential to you, how anonymity or confidentiality is to be guaranteed?
- Have you included a written consent form?
- If not, have you explained on the application form why you do not need to get written consent?
- Are you asking participants to give consent to:
  - collect data from them
  - attribute information to them
  - release that information to others
  - use the data for particular purposes
- Have you indicated clearly to participants on the information sheet or consent form how they will be able to get feedback on the research from you (e.g. they may tick a box on the consent form indicating that they would like to be sent a summary), and how the data will be stored or disposed of at the conclusion of the research?
- Have you included a copy of any questionnaire or interview checklist you propose using?
- Has your application been seen by the head of your school or department (or the person given responsibility to consider applications on behalf of the head (see Guidelines 5.3.2).

PLEASE FORWARD YOUR COMPLETED APPLICATION FORM TO THE SECRETARY, HUMAN ETHICS COMMITTEE, HUNTER BUILDING OR, IN THE CASE OF APPLICATIONS FROM SCHOOLS OR DEPARTMENTS WITH AN APPROVED ETHICS SUB-COMMITTEE, TO THE CONVENER OF THAT SUB-COMMITTEE

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# **Attachment A: Participant Consent Cover Letter**

[Participant's name] [Company name] [Employment address]

Dear [Participant's name],

#### PhD Research into the XP customer role

Thank you for indicating, in our recent [email] conversation, that you would be interested in being interviewed for this research.

Prior to conducting the interview, Victoria University of Wellington requires that I obtain your written informed consent. This consent is a normal part of any research project and forms one criterion of the Faculty of Commerce and Administration's Human Ethics Committee Guidelines that I must meet.

Attached for your information, therefore, is:

- A copy of the *proposal* submitted to [Organisation manager who approves research in organisation]. This proposal outlines the purpose, scope & approach to the project.
- An *interview agenda*, so that you will have a good sense of the nature of the questions I would like to ask during an interview with you.
- An *information sheet* that covers your rights throughout this process.
- A *consent form* that you can sign and return to me [in the enclosed envelope] if you decide to participate in this research.

I would like to emphasise that you do not have to participate in this research and that you are free to withdraw from this research without explanation up to the 30<sup>th</sup> of November 2003.

If you require any further information or if you would prefer not to be interviewed, please feel free to email me at <a href="mailto:angela@mcs.vuw.ac.nz">angela@mcs.vuw.ac.nz</a> or call me on +64 21 668 511. Alternatively you may contact either of my supervisors Robert Biddle (<a href="mailto:Robert@mcs.vuw.ac.nz">Robert@mcs.vuw.ac.nz</a> or +64 4 463 5833) or James Noble (<a href="mailto:kjx@mcs.vuw.ac.nz">kjx@mcs.vuw.ac.nz</a> or +64 4 463 6736).

Yours sincerely

Angela Martin (PhD Student)

Phone: +64 21 668 511

E-mail: angela@mcs.vuw.ac.nz

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#### **Attachment B: Information Sheet**

#### ETHICAL APPROVAL FOR INTERVIEW: INFORMATION SHEET

## Nature and purpose of research

This research project contributes towards the requirements for a PhD degree. The purpose of the research is to investigate the application of a software development process, and to critically assess the issues associated with the use of this process.

The research will be carried out by interviewing up to [insert number] staff members of [Company name]. An interview agenda has been attached to this information sheet outlining what information will be sought during the interviews. No personal details or information will be collected.

### Purpose of the material collected

Material collected from the interviews will be used within my research project as evidence of the application of a software development process and the organisational issues associated with its use. The final research report will be published as a PhD thesis held at the Victoria University Library. Conference and journal publications will also be written based on this research. Written interview notes will be stored at my home and/or at my office at the University, and destroyed at the completion of the project.

Before the interview proceeds, I need to be sure that I have permission of your employer for you to be interviewed as the consent form has a statement to this effect. To aid you through this process I will provide a signed copy of the attached proposal to you.

## Confidentiality

All raw data will be kept confidential to myself, my supervisors Robert Biddle and James Noble, and a professional transcriber Joanne Stevens. The research report (or any conference papers or journal articles that may result from the study) will not identify you or your employer. There will be an opportunity to review any written notes that result from the interview to ensure factual material is recorded accurately.

#### **Timing of the Project**

Initial interviews are scheduled for the [first week of November 2003], however follow-up interviews can be organised for 2004 should you wish to continue to participate in this research. The interview will take about one hour. The possibility of a further interview will be discussed with you at the time of the first interview

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#### **Attachment C: Consent Form**

# Victoria University of Wellington **Consent to Participation in Research**

# Project Title: Exploring the role of customers on eXtreme programming projects

I have been given and have understood an explanation of this research project and the confidentiality conditions. I have had an opportunity to ask questions and have them answered to my satisfaction.

I agree to be interviewed by Angela Martin for the purpose of this research for her PhD degree and resultant publications and conference publications. I consent to the collection and use of my perceptions, experiences, opinions and information in this research.

I understand that I may withdraw from this research up to the 30<sup>th</sup> of November 2003 without

penalty or explanation.	windan non this research up to the so of two emoci 2005 without
I confirm that I	
DO	DO NOT
have approval by my en	nployer to participate in this research project.
Do you agree to have in	nterviews tape-recorded?
YES	NO
Would you like to recei	ve a copy of any 2004 publications that are based on these interviews?
YES	NO
	an email address, or another contact mechanism (phone number / street se to contact you to organise to send a copy of these publications to you.
Name:Signed:Date:	

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# ATTACHMENT D: RESEARCH PROPOSAL SUBMITTED TO ORGANISATION ON-SITE CUSTOMER RESEARCH PROPOSAL

#### Introduction

The purpose of this document is to establish a research project with [Company]. In order to achieve this purpose this document covers the following:

- Objectives of the project
- Scope of the project and
- Approach to the project.

This proposal reflects an initial project concept that focuses on the on-site customer related practices of your implementation of eXtreme Programming. We look forward to working with you to mould it into a project that will meet our mutual objectives.

## **Objective**

- To recommend the key on-site customer practice improvements to be implemented on your next eXtreme Programming project
- To increase academic and industry knowledge of the on-site customer practices that work and do not work when implementing agile development practices.

# Scope

Is	Is Not
To explore the on-site customer related practices utilised on the project including:  Release & iteration planning Writing user stories Estimation process Priority planning Planning meetings Contractual issues On-site customer involvement	To explore the development specific practices including:  Pair programming Refactoring Metaphor Testing Collective ownership Continuous integration 40-hour week Coding standards
To understand and document the implementation of the 'text book' processes of the on-site customer including:  Activities that worked well for the team when using these processes (what we must keep on the next project)  Issues and difficulties the team encountered with these processes (what we need to change on the next project)  Suggested improvements to these processes (how we might change these processes on the next project)	To implement change or prepare a change management plan.
To provide recommendations for improvement based on literature and research findings.	To provide recommendations for improvement based on the consultant's experience.

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#### Approach

We will utilise a mixture of semi-structured one-on-one interviews with the project team and project artefact review to understand the project team's experience with this method.

The *interviews* will focus on the key project roles associated with the on-site customer practice including:

- Customer
- Programmer(s)
- Coach
- Big Boss
- Business stakeholders

The interviews will occur in a meeting room at your premises. The on-site location will minimise the disturbance to the interviewee's day-to-day activities. All interviews will be taped and later transcribed. The interviewees will be asked to validate the transcription of the interview and the interpreted findings.

The *artefact review* will focus on the key on-site customer related artefacts including user stories, plans and project walls. This review will allow us to understand the adherence and useful variations to the eXtreme Programming standards.

The *costs* to your company are expected to be minimal and time based only. The total time required of each identified team member (maximum of 7) is expected to be between 3 to 4 hours over a period of 2-3 months. The maximum period in 1 day for any team member will be 1 hour. All interactions would be arranged around the team members existing commitments, so disruption should remain minimal.

All raw data obtained during this project will remain *confidential* to the researcher, Angela Martin, her direct supervisors, Robert Biddle and James Noble, and a professional transcriber, Joanne Stevens. All findings will be reported at an aggregate level with the company and individuals retaining their anonymity. However [Company] is welcome to be identified in subsequent publications should they wish to be acknowledged as a practice leader.

## **Approval to Proceed**<sup>29</sup>

[Company] authoris	s this project to proceed under the conditions stated in this project	posal
Name:	Signature:	
Date:		

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<sup>&</sup>lt;sup>29</sup> Please note that we requested the removal of the "approval to proceed" section based on feedback from participants during our first interviews in the last quarter of 2003. We received HEC approval to remove this section in the first quarter of 2004.

# Attachment E: Proposed Interview Agenda INTERVIEW DETAILS:

Date: To be decided

Topic(s) The implementation of the planning & estimation practices on the xxxCorp xxx

Project

#### **OUTCOME:**

■ To recommend the key planning & estimation practice improvements to be implemented on your next project

• To increase academic and industry knowledge of the planning & estimation practices that work and do not work when implementing agile development practices.

#### **AGENDA:**

No.	Description	Duration
1.	Agree outcome, agenda & rules for the interview	05 mins
2.	Previous project and software development process experience of interviewee	10 mins
3.	Planning & estimation practices & processes (what we did on the project)	15 mins
4.	Activities that worked well for the team when using these 10 mins processes (what we must keep on the next project)	
5.	Issues and difficulties the team encountered with these 10 mins processes (what we need to change on the next project)	
6.	Suggested improvements to these processes (how we might change these processes on the next project)	05 mins
7.	Wrap-up	05 mins
	Review progress	
	Next steps	

#### RULES:

- The interview will be tape recorded to reduce the risk of the interviewer not obtaining all of the information provided by the interviewee during the interview.
- The transcription of the interview and subsequent findings will be provided to the interviewee to ensure all information has been recorded and interpreted accurately.
- To ensure all items are covered in sufficient detail any discussion concerning development practices will be noted in a register for further discussion.

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